

REMARKS

Claims 1-12 are pending in the application. Claims 1-5 and 7-11 were rejected under 35 U.S.C. §102(b) as being anticipated by Albrecht et al, U.S. Patent No. 5,821,494 (hereinafter "Albrecht"). Claims 1-5 and 7-11 were rejected under 35 U.S.C. §102(b) as being anticipated by Ainslie et al, U.S. Patent No. 4,761,699 (hereinafter "Ainslie"). Claims 6 and 12 were rejected under 35 U.S.C. §103(a) as being unpatentable over Albrecht. Claims 6 and 12 were rejected under 35 U.S.C. §103(a) as being unpatentable over Ainslie.

Rejections under 35 U.S.C. §102

Claims 1-5 and 7-11 were rejected under 35 U.S.C. §102(b) as being anticipated by Albrecht. Albrecht discloses making a solder connection between a slider pad and a suspension pad is provided by forming a solder bump on the solder pad at the slider level to affix the slider to the suspension (See Abstract).

The Applicants respectfully traverse these rejections, in part, because Albrecht fails to teach or suggest a metal pad having a bonding substance applied as a surface finishing material and heat treated prior to bonding the bonding pad to a surface, as called for in claims 1 and 7. The Examiner states, in regards to claims 1 and 7, that Albrecht discloses the invention as claimed. Albrecht states:

In FIG. 12A the slider 42 is affixed to the suspension 44 so that the slider pad 62 and the suspension pad 64 are adjacent one another for reflow of solder. A solder ball, produced at the end of the capillary from solder wire, is bumped against each of the slider pad 62 and the suspension pad 64 simultaneously to produce solder bump 122, as shown in FIG. 12B.

(See Albrecht, col. 10, lines 36-42).

In other words, a solder ball is placed between the slider pad and the suspension pad, at

which point the solder is used to create the bond. The solder is not a surface finishing material and it is not heat treated prior to bonding. In claim 1, a bonding pad for electrically bonding a magnetic head terminal is recited. Such a bonding pad includes a metal pad and a bonding substance (e.g. solder) as a finishing material. As described above, Albrecht does not show or suggest that a bonding pad with these two components be created. Instead, Albrecht describes a metal pad 64 and nothing further for the bonding pad. Therefore, Albrecht does not disclose a metal pad having a bonding substance as a surface finishing material, as set forth in claims 1 and 7. Since at least this feature of claims 1 and 7 is missing from Albrecht, the Albrecht reference fails to anticipate claims 1 and 7 under 35 U.S.C. §102(b). Applicant further respectfully submits that claims 2-5 and 8-11 are allowable as depending from the allowable base claims 1 and 7.

Claims 1-5 and 7-11 were further rejected under 35 U.S.C. §102(b) as being anticipated by Ainslie. Ainslie discloses mechanically attaching a slider to the suspension by means of reflowed solder balls. A pattern of solder contact pads is formed on the back side of the slider and a similar pattern of solder-wettable regions is formed on the suspension (See Abstract).

The Applicants respectfully traverse these rejections, in part, because Ainslie fails to teach or suggest a metal pad having a bonding substance applied as a surface finishing material and heat treated prior to bonding the bonding pad to a surface, as called for in claims 1 and 7. The Examiner states, in regards to claims 1 and 7, that Ainslie discloses the invention as claimed. Ainslie states:

As shown in FIG. 4, each of the contact pads 70 comprises an adhesion film 74 formed directly onto the slider back side 24 and a solder-wettable film 76 formed on the adhesion film 74. The solder contact pads are formed on the slider back side by a suitable mask having openings which is placed over back side 24.

(See Ainslie, col. 4, lines 18-23).

If the solder balls are not to be formed for some time, then a corrosion-resistant film 78 of, for example, gold is formed over the nickel film.

(See Ainslie, col. 4, lines 18-23).

In other words, a solder wettable film or corrosion resistant film acts as the surface finishing material for the slider pad, and not a bonding substance. Also, a bonding substance is neither applied nor heat treated prior to bonding. Further, Ainslie states:

Referring again to FIG. 3, the solder-wettable regions on suspension 40 are formed by removing selected portions of the polyimide insulating layer 48, which thereby exposes the circular openings 60, 61 on large area portions 52, 54 and the circular openings 63 on lead terminations 47.

(See Ainslie, col. 4, lines 18-23).

In other words, the suspension does not even have pads. Therefore, Ainslie does not disclose a metal pad having a bonding substance applied as a surface finishing material and heat treated prior to bonding the bonding pad to a surface, as set forth in claims 1 and 7. Since at least this feature of claims 1 and 7 is missing from Ainslie, the Ainslie reference fails to anticipate claims 1 and 7 under 35 U.S.C. §102(b). Applicant further respectfully submits that claims 2-5 and 8-11 are allowable as depending from the allowable base claims 1 and 7.

Based on the arguments above, reconsideration and withdrawal of the rejection of claims 1-5 and 7-11 under 35 U.S.C. §102(b) is respectfully requested.

Rejections under 35 U.S.C. §103

Claims 6 and 12 were rejected under 35 U.S.C. §103(a) as being unpatentable over Albrecht or Ainslie. Claims 6 and 12 include a metal pad having a bonding substance applied as

a surface finishing material and heat treated prior to bonding the bonding pad to a surface, through dependency on claims 1 and 7, respectively. As stated above, Albrecht and Ainslie both fail to disclose, teach, or suggest this limitation. Therefore, claims 6 and 12 are not obvious in view of either Albrecht or Ainslie.

Based on the arguments above, reconsideration and withdrawal of the rejection of claims 6 and 12 under 35 U.S.C. §103(a) is respectfully requested.

CONCLUSION

It is believed that this Amendment places the application in condition for allowance, and early favorable consideration of this Amendment is earnestly solicited.

If, in the opinion of the Examiner, an interview would expedite the prosecution of this application, the Examiner is invited to call the undersigned attorney at the telephone number listed below.

The Office is hereby authorized to charge any fees, or credit any overpayments, to Deposit Account No. 11-0600.

Respectfully submitted,

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